

pubes, but that the accident had been converted into a dislocation into the foramen ovale presenting all the characteristics.

"The pelvis strap and pulleys were again readjusted, but the direction of the force was now more upwards and outwards, the ankle held by the assistant was drawn under the other and at the same time rotated, and in a few minutes the head of the bone was felt to move, and almost immediately afterwards slipped into the cotyloid cavity, with the same grating sound as when it was dislodged from under the arch of the pubes. This sound more resembled that produced by the laceration of muscular and tendinous structures than the clear snap generally heard on the reduction of a dislocated bone.

"The force required was considerable, but the patient was well under the influence of chloroform during the whole time, except at the close; and when the luxation was reduced he immediately exclaimed that the bone was in its right place and expressed himself greatly relieved.

"His legs were bound together and he was placed in bed. From this time until the 5th day of February not a single bad symptom presented itself; he gradually recovered the use of his limb, and on the day of his discharge (5th Feb.) he was able to walk very well with the use of a stick."

47. *Dislocation of the Head of the Femur into the Obturator Foramen, with Preservation of the Movements of the Bone.*—Professor SÉDILLOT, of Strasburg, has communicated a highly interesting paper to the French Academy of Sciences, on the subject of the immediate preservation of the movements of the inferior extremity in cases of accidental displacement of the head of the femur into the obturator or thyroid foramen. The difficulty or absolute impossibility of the movements of the limb has invariably been considered as the most constant symptom of recent dislocations, especially in diarthrodial joints. It seems indeed difficult to imagine how a bone extruded by some violent effort from its articular cavity, an injury necessarily involving laceration of the ligaments, muscular tension, and changes in the natural position and direction of the limb, can possibly still allow of motion, so painless and extensive as not to interfere materially with the functions of the extremity. Surgeons, therefore, have neither surmised nor admitted that a patient, suffering from dislocation, may uninterruptedly pursue his usual avocations as if he had merely undergone some slight contusion. Instances of the kind exist, however, and are deserving of notice, inasmuch as they may induce a dangerous degree of security, and lead to disastrous errors of diagnosis.

This is the object of M. Sédillot's paper, and, in support of his views, the author adduces several cases of luxation of the femur forward and downward, in which the patients were nevertheless able to walk immediately after the occurrence of the accident, and to exercise as usual, without much pain or lameness. It is, moreover, for the purpose of cautioning the practitioner against an error which might readily be fallen into in such cases, that M. Sédillot enlarges on these circumstances which have not hitherto been pointed out. When the attention of the observer is led astray by the absence of any marked difficulty of locomotion, the gravity of the injury may easily escape detection, and a minute examination of the relative changes of situation of the pelvis and femur may appear unnecessary in consequence of the apparent unimportance of the symptoms. The persistency of the movements and functions of the limb, says M. Sédillot, is accounted for by the fulcrum afforded to the head of the femur by the depth and shape of the margin of the obturator foramen. Despite the immediate and spontaneous restoration of the power of using the extremity for the purposes of progression, the leading features of the displacement are nevertheless perfectly discernible, as may be seen in the instance of a young soldier who was admitted into the hospital of Strasburg for a lameness of obscure origin, which had even been suspected of being simulated. M. Sédillot relates the case as follows:—

*Case.* G. P——, æt. 18, a private in the 4th rifles, fell, while in a boat, on the 6th of October, 1860, but was unable to give any account of the circumstances which accompanied his fall. The patient continued to walk, but observed, three

days after the accident, that his right leg and thigh were slightly turned out, so as to induce a certain amount of lameness.

He was admitted into the hospital on the 22d of October, 1860, when his condition is described as follows:—

1. The right thigh and leg were slightly everted.
2. The anterior and superior spine of the ilium was found to be three lines lower than the same process on the opposite side.
3. The lateral breadth of the hips from the mesial line running along the trochanter major was seven inches on the left side, and six only on the right.
4. The distance from the mesial line of the body to the summit of the trochanter was seven inches and three lines on the left side, and ten inches on the right. (The lowering of the right side of the pelvis and the elongation of the limb must here be recollected.)
5. From the anterior and superior spine of the ilium to the summit of the patella, seventeen inches on the left side, and eighteen inches and a half on the right.
6. The circumference of the upper part of both thighs was the same, viz., eighteen inches and three-quarters.
7. Marked flattening of the right, and prominence of the left, trochanter.
8. The apparent elongation of the right leg was twenty-two lines.
9. In walking the right leg and thigh were turned outwards.
10. The right trochanter appeared to have sunk in; the furrow below the right buttock was lowered.
11. Abduction of the limb was perfectly unobstructed. But the right thigh could be brought into a line with the axis of the body when only the foot was everted.
12. The right foot could by no effort be turned inward.
13. In abduction the right thigh could be bent, but not in adduction.
14. The movements of adduction, and especially of abduction of the left leg, were singularly extensive.

*Reduction.*—The patient, who had taken chloroform, was laid horizontally on the uninjured side, and, for the purpose of extension, a sheet folded lengthwise was passed under the perineum, and its two ends, carried one in front and the other at the back of the pelvis, were twisted and secured; coaptation and counter-extension were performed by bending the leg and thigh, imparting a rotatory motion to the head of the bone, and finally by bringing it into adduction and rotation inwards; reduction was thus effected twenty days after the accident.

The natural shape and dimensions of the limb were entirely restored.

For six days the patient remained in bed, the right limb secured in extension and adduction, and attached to the left by a roller above the knees and malleoli.

P— was allowed to rise on the seventh day. He perceived no lameness, and three weeks after he left the hospital to join his regiment.

M. Sédillot's cases tend to show that the displacement of the head of the femur into the obturator foramen, when the movements are preserved, is characterized by an elongation of the limb of from five to fifteen lines, a symptom which is rendered more evident by the lowering of the hip-joint on the diseased side; the outward rotation of the extremity and the abduction of the foot; the prominence formed by the head of the bone in the vicinity of the pubes, and the depression existing in the spot it should naturally occupy; the impossibility of bending the thigh in adduction, and the ease with which this is accomplished when the limb is in abduction. Reduction is seldom difficult, even when the dislocation is of several weeks' standing, and is effected by traction outward of the upper part of the thigh, the knee being turned inward and forward, and placed in adduction when the head of the bone is supposed to be on a level with the acetabulum. In order to obviate a relapse, the only precaution necessary is to keep the injured extremity extended and turned slightly inward. The cure is rapid and complete. When the parts have not been replaced in their proper position, the bones adapt themselves to each other, and the patients are frequently enabled to use the limb, remaining, however, affected with permanent lameness.—*Ranking's Abstract*, vol. xxxiii., from *Journ. Pract. Med. and Surg.*, March, 1861.